

L 29679-66 EWT(m)/EWP(e) WH
AGC NR: AP6012852

SOURCE CODE: UR/0368/66/004/004/0306/0312

AUTHOR: Prishivalko, A. P.; Burakov, V. S.; Zhukovskiy, V. V.; Kopanik, Ye. K.

ORG: none

TITLE: Investigation of losses in a resonator with non-parallel bases

SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 4, 1966, 306-312

TOPIC TAGS: neodymium glass, solid state laser, laser cavity, laser optics, laser r and d, laser energy

ABSTRACT: In view of the fact that the radiation-power losses of a laser depend greatly on the adjustment of the resonator mirrors, the authors analyze in detail, both theoretically and experimentally, the dependence of the laser parameters on the angle between the mirrors. The theoretical analysis is made in the geometric-optics approximation and is based on a calculation of laser resonator losses published by B. I. Stepanov and V. P. Gribovskiy (UFN v. 82, 201, 1964). A formula is derived for the loss coefficient of the mode with the largest number of passages of the beam, and is used to calculate the loss coefficient of a neodymium-glass laser. The results of the calculation were checked experimentally for three samples of neodymium-glass with different diameters and different surface finishes,

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UDC: 621.375.9

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ACC NR: AP6012852

using a measurement procedure described by the authors earlier (ZhPS v. 2, 50⁴, 1965). This method is based on determining the internal losses of the laser from the characteristic rise time of the lasing action. Plots are presented of the relative loss coefficient and the relative emission power against the misalignment angle of the mirrors. The calculations show that the losses increase rapidly with increasing angle, and that the minimum angle at which the loss can be neglected is $\sim 15.5^\circ$, which is lower than that given in the published specification. The discrepancy is attributed to the presence of systematic inhomogeneities in the rods, causing deflection of the beams to one side. The authors thank Academician AN BSSR B. I. Stepanov for interest in the work and a discussion of the results. Orig. art. has: 4 figures and 10 formulas.

SUB CODE: 20/ SUBM DATE: 06Sep65/ ORIG REF: 012/ OTH REF: 001

Cord 2/2 (C)

STEPANOV, B.I.; PRASHIVALKO, A.P.

Dependence of the radiation power of plane-mirror gas lasers on the angle of unparallelism of the mirrors. Dokl. AN BSSR 9 no.7:432-434 JI '65. (MIRA 18:9)

1. Institut fiziki AN Belorusskoy SSR.

PRISHIVALKO, A.P. [Pryshyvalka, A.P.]; KOPANIK, Ye.K. [Kapanik, A.K.]

Calculating the luminescence in a resonator with outer mirrors
in the case of disadjustment. Vestsi AN BSSR. Ser.fiz.-mat.
nav. no.2:65-70 '65. (MIRA 19:1)

PRISHIVALKO, A.P.; KOPANIK, Ye.K.

Effect of the adjustment of resonator mirrors on the radiation parameters. Dokl. AN BSSR 9 no.10:654-658 0 '65.

(MIRA 18:12)

1. Institut fiziki AN BSSR. Submitted January 30, 1965.

PRISHIVALKO, A.P.

Accuracy of determining the optical constants of absorbing substances by the rotating polarizer method. Dokl. AN BSSR 5 no.10: 433-437 0 '61. (MIRA 15:3)

1. Institut fiziki AN BSSR. Predstavleno akademikom AN BSSR B.I.Stepanovym.
(Absorption spectra) (Polarization (Light))

S/051/63/014/002/014/026
E032/E314

AUTHOR: Prishivalko, A.P.

TITLE: A study of the scattering of light by large, highly-absorbing spherical particles

PERIODICAL: Optika i spektroskopiya, v. 14, no. 2, 1963, 270-274

TEXT: Calculations showed that the scattering of light by large ($\rho \geq 100$), highly-absorbing particles could be described on the basis of the geometrical-optics approximation and the assumption that only the light reflected at the surface of the particles need be taken into account. In the present work, tabulations of Fresnel formulae for the reflection coefficients of absorbing media, reported in a previous paper (Opt. i spektr., 11, 555, 1961), are used to elucidate the dependence of the scattering indicatrix, the degree of polarization of the scattered light and the scattering coefficient on the optical constants of the scattering particles. The numerical results of these calculations are reproduced in the form of graphs, and an attempt is made to compare these results with experimental data. Thus, Fig. 4 shows

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S/051/63/014/002/014/026

E032/E314

A study of the scattering of light..

the relative scattering of p and s components as a function of scattering angle. The continuous lines represent experimental results reported by Ye.O. Fedorova (Tr. GOI, 25, no. 151, 1957), while the dashed curves represent calculations for Se using the optical constants reported by N.N. Pribytkova (Opt. i spektr., 2, 623, 1957). The two sets of curves are normalized to unity at $\beta = 90^\circ$. Since the particles used by Fedorova were not spherical, while the optical constants of Se were read-off a small-scale graph given by Pribytkova, it is considered that the agreement between theory and experiment is adequate. There are 4 figures.

SUBMITTED: March 8, 1962.

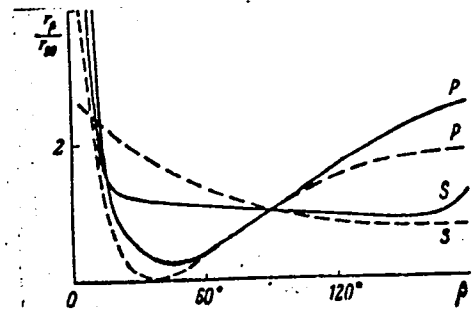


Fig. 4:

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S/051/60/009/004/013/034
E201/E191

9.5320

AUTHOR: Prishivalko, A.P.

TITLE: Determination of the Optical Constants of Absorbing
Materials from Measurements of Stokes Parameters for
Reflected Light

PERIODICAL: Optika i spektroskopiya, 1960, Vol 9, No 4, pp 493-500

TEXT: Stokes parameters are four-dimensional vectors which
give intensity and polarization of a light beam. The four
components of a Stokes parameter can be measured experimentally.
The author relates the Stokes-parameter components S_1 , S_2 , S_3
and S_4 to components of a three-dimensional polarization vector
 P_i ($i = 1, 2, 3$), by

$$S_1 = I, \quad S_2 = IP_1, \quad S_3 = IP_2, \quad S_4 = IP_3, \quad (3)$$

where I is the beam intensity and the quantities P_i are
independent of I . Relationships between P_i , the optical
constants n and χ , and the angle of incidence φ , are
derived (Eqs (6) and (8)) and nomograms are given for
determination of the optical constants from values of P_i (Figs 1-4).

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⁵³⁹¹⁷
S/051/60/009/004/013/034
E201/E191

Determination of the Optical Constants of Absorbing Materials from
Measurements of Stokes Parameters for Reflected Light

Acknowledgement is made to B.I. Stepanov for his advice.
There are 4 figures and 11 references: 8 Soviet and 3 English.

SUBMITTED: January 18, 1960

Card 2/2

x

PRISHIVALKO, A.P.; GUSAK, G.M.; ONICHEK, I.L.

Tables of Fresnel coefficients for absorbing media. Opt.1
spektr. 11 no.4:555-556 0 '61. (MIRA 14:10)
(Reflection (Optics))

PRISHIVALKO, A.P.

Precision of the spectrophotometric method for the determination of the optical constants of absorptive substances.
Trudy Inst.fiz.i mat.AN BSSR no.3:176-186 '59.

(MIRA 13:4)

(Spectrophotometry)

24(4)

96559
30V/170-59-9-10/18

AUTHOR: Prishivalko, A.P.

TITLE: On the Accuracy of Determining the Optical Constants of Absorbing Materials by the Mirror Reflection Method

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 9, pp 74-82 (USSR)

ABSTRACT: A number of methods for determining optical constants by measuring coefficients of mirror reflection of natural or polarized light are mentioned and criticized. The author studied the mirror reflection method with a purpose to find the best conditions and values of incidence angles, making use of the tables of reflection coefficients of absorbing materials composed by Stepanov and Gol'man [Ref 10]. He investigated the accuracy of determination of n and χ , the real and imaginary part of the relative index of refraction, by plotting the curves expressing the functional dependence of their partial derivatives with respect to reflection index on the angle of incidence, Figures 1 and 2. The comparison of the graphs shows that the use of polarized light ensures a considerably greater accuracy for determination of the optical constants. The values of errors are given in Tables 2 and 3. The relative errors in the determination of n and χ do not exceed 10%, if the second angle of incidence is sufficiently great, 80° .

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SOV/170-59-9-10/18
On the Accuracy of Determining the Optical Constants of Absorbing Materials by the Mirror Reflection Method

and their values are in the following limits: $0.4 \leq n \leq 1.8$ and $0.2 \leq \chi \leq 1.5$. In order to facilitate the calculation of the optical constants, the author proposes new nomograms, Figures 3 and 4, for polarized light and second incidence angle values of 70 and 80°. In conclusion the author thanks B.I. Stepanov for the suggested subject of investigation and attention.

There are: 2 sets of graphs, 2 nomograms, 3 tables and 10 references, 2 of which are Soviet, 6 English and 2 German.

ASSOCIATION: Institut fiziki AN BSSR (Institute of Physics of the AS BSSR), Minsk.

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PRISHIVALE, A.P.

Reproduction of the original of the diploma in the name of
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1. Institut
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S/058/62/000/005/054/119
A057/A101

AUTHOR: Prishivalko, A. P.

TITLE: Regularities of phase difference changes in reflection of light from absorbing media

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 2, abstract 5G15 ("Dokl. AN BSSR", 1961, v. 5, no. 9. 383-386)

TEXT: Calculated data are given of the difference $\Delta = \delta_p - \delta_s$ for phase jumps δ_p and δ_s which arise in reflection of light from an absorbing medium, when the light is polarized parallel or perpendicular to the incidence plane. The calculations were carried out for several incidence angles φ ($10^\circ - 85^\circ$) and for a series of real n and imaginary χ parts of the refractive index of the medium ($0.6 \leq n \leq 3.0$ and $0.02 \leq \chi \leq 4.0$). Some regularities of the function of Δ on φ , n , χ are discussed and conclusions drawn on the applicability of the measured value of Δ for the calculation of n and χ . 13

[Abstracter's note: Complete translation]

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PRISHIVAIKO, A.P.

Homograms for determining the optical constants of light absorbing substances according to the Avery method. Inzh.-fiz.zhur. no.2:5)-85 F '60. (MIRA 13:7)

1. Institut fiziki AN BSSR, Minsk.
(Materials--Optical properties)

PRISHIVALKO, A.P.

Passing of light through layers of absorbing powders. Trudy Inst.
fiz. i mat. AN BSSR no.2:206-213 ' 57. (MIRA 12:1)
(Light)

PRISHIVALKO, A. P.

AUTHOR: Prishivalko, A. P.

48-11-12/13

TITLE: Some Questions Relating to the Theory of Dispersion-Light-Filters
(Nekotoryye voprosy teorii dispersionnykh svetofil'trov).

PERIODICAL: Izvestiya AN SSSR Sviya Fizicheskaya, 1957, Vol. 21, Nr 11,
pp. 1541-1547 (USSR).

ABSTRACT: Referring to the treatise of C. V. Raman (reference 9), a somewhat more careful investigation on the interference phenomenon in light-dispersing layers (not only in dispersion-light-filters, but also in any dispersing media) is carried out. Like with Raman, the whole light-dispersing layer is split up in a series of elementary layers, the thickness of which is determined by the average dimensions of particles, in which case it is assumed that the activity of each of these layers is independent of the others. The intensity of the light passing in any direction through the layer, can be calculated by adding the oscillations proceeding from the individual cells by taking account of the phase difference. The cells are chosen in such a way (each layer is assumed to consist of a greater number of cells) that within the range of each cell the index of refraction may be assumed to be either constant, or varying in accordance with a certain rule. It is shown that the intensity of the light passing

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48-11-12/13

Some Questions Relating to the Theory of Dispersion-Light-Filters.

straight through, depends only on the extent to which filling has taken place. Taking account of the discreet composition and structure of the layer, a formula of the intensity of the light passing straight through in the case of a half-filling, is derived and a second formula is derived which is applicable for any filling whatever. It is shown that within a range close to the transparency-maximum, and with a sufficient number of layers, the two formulae change over into that of Raman. If λ_0 , and the thickness of the elementary layer, as well as the course taken by the dispersion-curve are known, the necessary thickness of the light-filter can be calculated in advance. With those models of which the average index of refraction varies continually, demonstrative results were obtained with respect to light distribution according to angles. It is shown that where the dispersed substance absorbs light, only the character of the dispersed substance absorbs light, only the character of the dispersion of light depends on the position of the cells. The direct light is determined only by the absorption coefficient and the extent of filling. With the obtained diagrams it is further shown that when investigating the spectra of substances in dispersed state, the degree of heterogeneity of the medium must be taken into account. For a detailed explanation of the question re-

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Some Questions Relating to the Theory of Dispersion-Light-Filters. 48-11-12/13

ferred to in this report, see reference 11.

There are 7 figures, and 11 references, 2 of which are Slavic.

ASSOCIATION: Institute of Physics and Mathematics AN Belorussian USSR (Institut fiziki i matematiki Akademii nauk BSSR).

AVAILABLE: Library of Congress.

Card 3/3

PRISHIVALKO, A.P.

Stepanov, B. I., Akademicheskaya 15
Kholmanskaya 53B
507/50-59-1-9/57

24(7), 24(6)
AUSPOB:

12

12

TITLE: Investigations by Belorussian Scientists of the Luminescence Spectroscopy and Luminance Characteristics of Luminants

po spektroskopii i lyuminescencii

PHARMACEUTICALS:

ABSTRACT

These investigations are being carried out at the Institute of Mathematics and Mechanics of the Kazan State University and the Physico-Mathematical Institute of the Kazan State University under the direction of Academician V. A. Mal'nev, A. M. Sevchuk, M. A. Tsel'man, M. A. Tsyplovskiy, and V. A. Zolotarev, A. P. Fedorov, and V. I. Arshinov. The Institute of Mathematics and Mechanics of the Kazan State University, the Kazan State Academy of Sciences, USSR, and the Physico-Mathematical Institute of the Kazan State University are thanked for their assistance. The following investigators are indicated:

A. P. Frishvalko, B. I. Stepanov developed a theory of dispersion light filters.

infrared range.

A. F. Frishkevich analyzed the accuracy and the field of application of existing methods of optical analysis of mixtures and not dispersed materials.

V. A. Kuznetsov, A. A. Labud, Ye. G. Mityayev obtained important results concerning the kinetics of one single spark discharge (spectral intensity and the mutual influence).

A. A. Lukatskiy, V. A. Mikhlin examined the mutual influence of the spark discharge on the spectral analysis, and explained the methods for their elimination.

for their elimination.

G. V. Oreckin suggested a series of methods to eliminate the influence of third elements.

G. V. Oreckin, M. P. Krivogheev succeeded in working out a method for the isolation of penicillin in ordinary penicillin.

control method of benzyl phenidate in organic products.
N. A. Borisovich, N. I. Makarovich, A. I. Sytyan examined the
control method of benzyl phenidate in organic products.

infrared spectra of resinous products.
W. A. Borisovich, V. I. Pankovich, I. V. Gurinovich examined
a series of structural peculiarities of alcohol oxides.

M. A. Borisovich worked out a luminescence method for the determination of the germinating power of the seed of some kinds of trees.

A. Ya. Prokopchuk obtained good results by the use of luminance analysis in dermatology.

albuminone polysaccharide complexes.

B. A. Markov used spectral methods for analysing aluminum fractions in the blood.

N. A. Sevchenko spectroscopically examined the structure of various silicas.

B. I. Stepanov, A. M. Prim' carried out theoretical investigations of the vibrational spectra of various silicate crystals and various silicates.

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PRISHIVALKO, A.P.

Accuracy of determining the optical constants of absorbing substances from the reflection in a setup using a polarizer and an analyzer. Opt. i spektr. 11 no.2:248-258 Ag '61.

(MIRA 14:8)

(Optical measurements)

L 52760-65 ENT(1)/ENG(r)/TCC/EEC(t) Ps-5/P1-4 GW/GS

ACCESSION NR: AT5011164

UR/0000/64/000/000/0108/0113

AUTHOR: Ivanov, A. P.; Kopanik, Ye. K.; Prishivalko, A. P.; Predko, K. G.

TITLE: Investigation of the indicatrix of scattering of light by large absorbing particles of irregular form

SOURCE: Mezhdedomstvennoye soveshchaniye po aktinometrii i optike atmosfery. 5th, Moscow, 1963. Aktinometriya i optika atmosfery (Actinometry and atmospheric optics); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 108-113

TOPIC TAGS: atmospheric optics, light scattering, atmospheric absorption, atmospheric physics, aerosol, particle shape, scattering indicatrix

ABSTRACT: This paper is a continuation of investigations begun by Ye. O. Fedorova (Trudy GOI, 1957, 25, No. 151). It presents an experimental study of the indicatrix of scattering of light by individual, large, slightly absorbing particles of irregular form. These data are compared with computed data for spherical particles with the same optical constants. The first part of the paper discusses the results of a theoretical investigation of the scattering of light by spherical, slightly absorbing particles; the second part presents the experimental data. The particles of investigated matter successively entered a light beam. Upon passing through the beam the particle scatters light in all directions.

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ACCESSION NR: AT5011164

The small quantities of light scattered by individual particles are summed on a photographic film. The density of blackening on the film is used to determine the angular distribution of scattered radiation, that is, the indicatrix of scattering. The apparatus is described fully in the paper by Fedorova mentioned above. Among the results, it is noted that with an increase in the wavelength of light the indicatrix of scattering is extended forward as a result of a decrease in the refractive index, whereas for absorbing particles this effect is considerably greater. This confirms the conclusion that with an increase in absorptivity the indicatrices of scattering of particles of irregular form are elongated forward. The degree of polarization for spherical particles is large and changes sharply with the angle of scattering. Regardless of the polarization of the incident light the indicatrices are very similar. The absolute value of the degree of polarization for particles of irregular form is insignificant. Comparison of the results of scattering on particles of spherical and irregular form demonstrates convincingly that the character of light scattering by particles of regular and irregular form is essentially different. For this reason, it is impossible to model particles of an arbitrary form by spherical centers of scattering of some effective size, as frequently is done. "In conclusion, the authors express deep appreciation to Ye. O. Fedorova for use of the apparatus used in the investigations, advice and discussion of the results." Orig. art. has: 8 formulas and 3 figures.

Cord

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L 52760-65

ACCESSION NR: AT5011164

ASSOCIATION: Institut fiziki AN BSSR, Minsk (Physics Institute, AN BSSR)

SUBMITTED: 25Nov64

ENCL: 00

SUB CODE: ES, OP

NO REF SOV: 003

OTHER: 007

Card

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PRISHIVALKO, A. P.

007/1999

TRANSLATIONS

16(1) 24(4,5)

Abstracts from the Institute of Mathematics and Mechanics

Trudy, 779. 2. (Translations of the Institute of Physics and Mathematics, Siberian Academy of Sciences, Br 2) Khab, 1971. 265 p. Russian plus English. 170 copies printed.

Ed.: B. I. Stepanov, Academician, USSR Academy of Sciences; Ed. of Publishing House: L. Murina, Tech. Sci. L. Tolstomirova.

REMARKS: This book is intended for mathematicians, physicists, and graduate students in mathematics and physics.

CONTENTS: This book contains a series of articles on recent contributions by members of the Institute of Mathematics and Mechanics (Institute of Physics and Mathematics, Siberian Academy of Sciences, Br 2), in the fields of radiation, mechanics, optics, and spectroscopy and on the applications to physics of analysis, linear algebra, linear groups, theory of adjointness, and differential equations. The

first article contains a brief account of the work of the Institute, including names of scientists and mathematicians connected with it, facilities, scientific accomplishments, and fields of interest.

Translations of the Institute (cont.)

007/1999

Gedner, T. B., B. V. Yefremov, and L. A. Kravtsov. On the Spectral Properties of Chlorophyll and Chlorophyllide Complexes With Protein and Certain Other Compounds. 85

Erlyukhin, A. M. Spectroscopic Investigation of Sulphur and Iron in Sources of Light for Spectral Analysis. 95

Yankovskiy, A. A. On the Role of Electric Parameters of a Discharge Contour With an Examination of the Spectrum by a Low-voltage Impulse Discharge. 110

Prism, A. M. Calculating the Oscillating Spectra of Silicates. 126

Volod'ko, L. V. Electronic Spectra of Solutions of Uranium Salts. 176

Stepanov, B. I., and A. P. Prishivalko. On the Theory of Dispersion Light Filters. 189

Prishivalko, A. P. The Filtration of Light by Layers of Absorbent Dust. 206

Card 3/5

PRISHIVALKO, A.P.

Determination of the optical constants of absorbing substances from
measurements of Stokes parameters for reflected light. Opt. i spektr.
9 no.4:493-500 0 '60. (MIRA 13:11)
(Absorption of light) (Reflection (Optics))

PRISHIVOYT, G.N.; BORTNIK, T.A.

Some hematological indicators of healthy people in the City
of Frunze. Sov. zdrav. Kir. no.3:10-14 My-Je'63.(MIRA 16:9)

1. Iz Kirgizskogo nauchno-issledovatel'skogo instituta onkolo-
gii i radiologii (dir. - prof. A.I.Sayenko)
(FRUNZE—BLOOD—ANALYSIS AND CHEMISTRY)

ZHURAVA, I.; PRISHKU, A.; VASILESKU, D.

Diaphragmatic hernia forming through the esophageal hiatus.
Khirurgiia 36 no.1:88-93 Ja '60. (MIRA 13:10)
(DIAPHRAGM--HERNIA)

PRISHLETSEV, D.V.

ISSUE I BOOK INFORMATION 807/643

Издательство Металлургического института. Институт металлургии

Преподает в Металлургическом институте, преподаватель металлургии
(Проблемы контроля и диагностики коррозии в металлургии)
Ленинград, 1960. 194 с. (Серия: Изд. Труды, 779. 5) Книга
альбом. 1,000 экз. Издана.

Изд. М.: М. И. Кошаров, и В. П. Чернышова, Редакция издательства
Металлургия. М.: Издательство Металлургического института.
и В. П. Чернышова.

ПРЕДМЕТ: This collection of articles is intended for technical personnel of
metallurgical plants and for members of scientific research institutes.

СОДЕРЖАНИЕ: The collection contains articles discussing a variety of problems
pertaining to ferrous and nonferrous metallurgy. The number of articles
describes new methods for investigating the properties of alloys and oxides
and review changes which these properties undergo as a result of the effect
of temperature and other factors. Findings of studies are summarized
in numerous articles and processes to be used for manufacturing ferroalloys
and naturally alloyed steels are suggested. Characteristics of various
metal compounds are given and measures for the most efficient utilization of
ores are indicated. Some of the articles are devoted to the study of problems
of manufacturing ferrous, nonferrous, and alloy metals. The selection of
topics was made on the basis of alloys and for material relating to the improve-
ment of the quality control of alloys and the manufacturing processes employed
to produce them. References are given to the literature of the field.

АВТОРЫ: D.V. Prishletsev. On the Problem of Producing Naturally Alloyed Vanadium Steel
From Vanadium Pig Irons Free of Sulfur and Phosphorus by Blowing

Бродя, В.П. The Action of Carbon Monoxide on the Iron Monoxide Dehydration
Process

Бродя, В.П. Secondary Hydration of Iron Monoxide

Бродя, В.П. (continued) Ways of Utilizing the Metal Deposits Ores

Бродя, В.П. and O.A. Yudin. Concerning Transfer of Iron With the
Flow in the Electrolysis of Molten Iron Alloys

Бродя, В.П. and A.P. Pashkov. Regularity Patterns in Changes of the
Electrical Resistance of Cobalt and Copper Alloys

Бродя, В.П. and P. S. Ruzhik. Microscopic Investigation of Products Re-
sulting from Aluminization of Metal Monoxides With Elementary Sulfur

Бродя, В.П. and S.P. Pashkov. Interaction of Antimony Sulfide and
Tin Trifluoride in Liquid Phase

Бродя, В.П. and V.I. Belikov. Study of the Interaction of Antimony
Sulfide and Oxide in Gaseous Phase

Бродя, В.П. and P.S. Ruzhik. S.P. Pashkov (continued). A.A. Pashkovskis,
M.T. Pashkov, V.V. Pashkovskis, and V.I. Belikov. Self-Fluorine Smelting
of Oxidized Irons Ore Slurries Using Highly Sulfurous Gases

Бродя, В.П. and L.S. Pashkovskis. Determination of Small Quantities
of Sulfur in Alloys with Copper

Бродя, В.П. and L.S. Pashkovskis. Polarographic Method of Determin-
ing Sulfur in Copper and Lead-Containing Compounds

Бродя, В.П. and P.S. Ruzhik. Electrical Conductivity of Melts of the
Binary Fe-Al System

Бродя, В.П. and P.S. Ruzhik. Equilibrium Diagrams of the Fe-Al - Al₂O₃ - Al₂Cl₃ System

Бродя, В.П. and P.S. Ruzhik. Effect of Impurities on the
Rate of Chlorination of Magnesium Oxide by Molten Chloride Salts

Бродя, В.П. and P.S. Ruzhik. Effect of Certain Factors on the
Rate of Chlorination of Magnesium Oxide

Бродя, В.П. and P.S. Ruzhik. On the Recovery of Sulfuric Acid and
Potassium Sulfate from Mixtures of Sulfate Solutions

Бродя, В.П. and P.S. Ruzhik. Library of Congress

Бродя, В.П. and P.S. Ruzhik. Library of Congress

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Бродя, В.П. and P.S. Ruzhik. Library of Congress

Бродя, В.П. and P.S. Ruzhik. Library of Congress

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Бродя, В.П. and P.S. Ruzhik. Library of Congress

USPENSKIY, N.F.; KUSAKIN, P.S.; DIYEV, N.P. [deceased]; PERESTORONIN,
A.A.; TIKHONOV, A.I.; PRISHLETSOV, D.V.; YERKIN, L.I.

Shaft furnace melting of an oxidized nickel ore sinter with
use of highly sulfurous coke. Trudy Inst.met.UFAN SSSR
no.5:123-135 '60. (MIRA 13:8)
(Nickel--Metallurgy) (Sulfur)

PRISHLETSOV, Dmitriy Vasil'yevich; TSEYDLER, A.A., professor, doktor,
~~PETSEKHENT~~; BOCHKAREV, L.M., inzhener; GUDIMA, N.V., redaktor;
KAMAYEVA, O.M., redaktor; ATTOPOVICH, M.K., tekhnicheskii
redaktor.

[Shaft-furnace smelting of oxidized nickel ores; a textbook]
Shakhtnaya plavka okislennykh nikelovykh rud; uchebnoe posobie
dlya shkol i kursov masterov, Moskva, Gos.nauchno-tekhn.izd-vo
lit-ry po cherno i tsvetnoi metallurgii, 1955. 261 p.(MLRA 8:11)
(Nickel--Metallurgy)

PRISHLETSOV, N. F.

Transport, vnutrennie i vneshnie sviazi. Zheleznye dorogi. ☒Transportation, interior and exterior communications. Railroads/. (In Akademiia nauk SSSR. Institut geografii. Moldavskaiia SSR. Moskva, 1947, p. 104).

DLC: DK511.M55A7

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

PRISHLETSOV, N. F.

Transport, vnutennie i vneshnie svyazi; rechnye puti. [Transport, interior and exterior connections; waterways]. (In Akademiia nauk SSSR. Institut geografii. Moldavskaya SSR. Moskva, 1947, p. 106: Rechnye puti)

DLC: DK511.M55A7

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

PRISHLETSOV, N. F.

Transport vnutrennie i vneshnie svyazi; shosseinye i gruntovye dorogi. /Transportation, interior and exterior communications: highways and dirt roads/. (In Akademiia nauk SSSR. Institut geografii. Moldavskaiia SSR. Moskva, 1947, p. 107).

DLC: DK511.M55A7

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

ACCESSION NR: AT4039417

S/2835/62/000/025/0015/0021

AUTHOR: Barabashov, N. P.; Yezerkiy, V. I.; Prishlyak, N. P.

TITLE: Differences in the microrelief of different sectors of the lunar surface

SOURCE: Kharkov. Universitet. Astronomicheskaya observatoriya. Tsirkulyar, no. 25, 1962, 15-21

TOPIC TAGS: astronomy, photometry, lunar surface, lunar microrelief, moon

ABSTRACT: To a considerable degree, the lunar surface possesses photometric uniformity and therefore the microrelief responsible for the character of the reflection is also uniform. Only in individual cases is there an appreciable difference, indicating a difference in microrelief or the presence of slopes. In making a detailed study of the photometric characteristics of individual sectors of the lunar surface it is desirable to compare them with averaged data for the lunar surface. Such averaging is possible because, for, a particular value of the phase angle, brightness is a function only of selenographic longitude. The authors used graphic methods for finding the dependence of B on γ for different values of α . The brightness of a detail was expressed by its brightness at full moon. The resulting curves of the dependence of brightness on γ for different values of the

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ACCESSION NR: AT4039417

phase angle, when put in graphic form, represent the law of light reflection from the lunar surface as a whole. On the basis of the dependence of B on λ it is possible to compute the relative brightness of the moon for a particular phase angle. The derived curves were used to determine the deviations of brightness of various details from the curves representing the averaged lunar surface, the deviations being expressed by the relative value $\Delta B/B$, where ΔB is the deviation, with sign taken into account, and B is the brightness value from the curve for the corresponding value of λ . The character of the dependence of $\Delta B/B$ of individual details on phase angle was then investigated. A considerable number of details were found for which the value $\Delta B/B$ and the dispersion σ are small and which represent a photometrically averaged moon. The condition $\left| \frac{\Delta B}{B} \pm \sigma \right| < 0.15$ was

satisfied by 67 of 164 details (about 40%). Of these, 29 were sectors in seas, constituting 54% of the total number of details in the seas. The similar relation for continents and craters was 26% (25 out of 94 details). The above condition was also satisfied by about 50% of the bright rays and bands. There were a number of details for which the value $\Delta B/B$ was positive, equal to 0.2-0.3 with a relatively small dispersion; these details are listed in a table; all are craters or continental regions. Another table lists details for which brightness was systematically less and the value $\Delta B/B$ had a negative sign with a relatively small dispersion: these details include both continental and sea areas. The authors

Card

2/3

ACCESSION NR: AT4039417

interpret these photometric differences. "In conclusion the authors thank M. K. Kapinus and L. I. Yefimova who performed some of the computations for this study". Orig. art. has: 6 formulas, 2 figures and 4 tables.

ASSOCIATION: Astronomicheskaya observatoriya Khar'kovskogo universiteta
(Astronomical Observatory of Khar'kov University)

SUBMITTED: 00

DATE ACQ: 23Jun64

ENCL: 00

SUB CODE: AA

NO REF SOV: 007

OTHER: 002

Card 3/3

PRISHLYAK, V.Z.; KOBLAY, D.S.; DIK, I.I.; PUZIY, Ya.S.; YAREMENKO, I.A.;
KOLESNIK, G.K.; DEGERIN, E.R.; MEL'NIK, P.A.

From the editor's mail. Sakh.: prom. 36 no.9:68-70 S '62.
(MIRA 16:11)

1. Khodorovskiy sakharanny kombinat (for Prishlyak).
2. Shpanovskiy sakharanny zavod (for Koblay).
3. Kanevskiy sakharanny zavod Krasnodarskogo kraya (for Dik).
4. Korenovskiy sakharanny zavod Krasnodarskogo kraya (for Puziy).
5. Sumskey sakharanny trest (for Yaremenko).
6. Leningradskiy sakharanny zavod Krasnodarskogo kraya (for Kolesnik).
7. Kurskiy sovet narodnogo khozyaystva (for Dege-
rin).
8. Zhdanovskiy sakharanny zavod (for Mel'nik).

SOLDATKIN, A.I., kand.tekhn.nauk; Prinimaldi uchastiye: PETROKHIN, B.A.;
BABIIY, A.A.; SHARKEVICH, I.D.; VYAZOVSKIY, Yu.V.; GRIBANOV, L.M.;
KIREYEVA, K.K.; PAVLOVA, V.D.; PRISHUTOVA, V.S.

Preparation of fluxed sinter from Kerch ore concentrates. Trudy
Ukr. nauch.-issl. inst. met. no.7:36-50 '61. (MIRA 14:11)
(Kerch Peninsula--Iron ores) (Sintering)

PRISHVIN, M.

Arboreal kingdom. Vokrug sveta no.1:36-41 Ja'55. (MLRA 8:2)
(Russia, Northern--Forests and forestry)

PRISHVIN, MIKHAIL MIKHAILOVICH.

PRISHVIN. MIKHAIL MIKHAILOVICH.

Moia strana. Moskva, Geografiz, 1948. 451 p.

SO: L. C., Soviet Geography, Part I, 1951, Uncl.

PRISHVIN, M.

Training of dogs. Nauka i zhizn' 30 no.3:91-92 Mr '63. (MIRA 16:5)

(Dogs--Training)

PRISHVIN, M.M.

Unclassified

Book:

Author: Prishvin, M. M.

Title: Storing of Solar Heat

Publishing Data: 1948, Moscow, 97 pages

Available: L.C., PZ64.F7

maj DC
7/19/55

PRISHVINA, V.Ye.; CHEKASOVA, N.V.

Effect of ginseng on basal metabolism in thyrotoxicosis. Trudy
Khab.med.inst. no.20:156-161 '60. (MIRA 15:10)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. dotsent
S.F.Surovtseva) Khabarovskogo meditsinskogo instituta.
(GINSENG) (BASAL METABOLISM) (THYROID GLAND---DISEASES)

KATSAUROV, Igor' Nikolayevich, dots., kand. tekhn.nauk; PRISHVITSYN, ~~---~~
V.M., otv. red.; CHECHKOV, L.V., red. izd-va; IL'INSKAYA, G.M.,
tekhn. red.

[Rock pressure in vertical shafts] Gornoe davlenie v vertikal'-
nykh stvolakh. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gor-
nomu delu, 1961. 153 p. (MIRA 15:2)
(Mine timbering) (Rock pressure)

KALMYKOV, Yevgeniy Pavlovich; PRISHVITSIN, V.M., otv. red.; YERASHKO,
I.S., otv. red.; ZVORYKINA, L.N., red. izd-va; IL'INSKAYA, G.M.,
tekhn. red.

[Construction of vertical shaft tops] Sooruzhenie ust'ev verti-
kal'nykh stvolov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po
gornomu delu, 1960. 122 p. (MIRA 14:9)
(Coal mines and mining)

KALMYKOV, Yevgeniy Pavlovich; PRISHVITSIN, V.M., otv.red.; YERASHKO, I.S.,
otv.red.; ZVORYKINA, L.I., red.izd-vs; IL'INSKAYA, G.M.,
tekhn.red.

[Arrangement of vertical shaft tops] Sooruzhenie ust'ev verti-
kal'nykh stvolov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po
gornomu delu, 1960. 118 p. (MIRA 14:1)
(Shaft sinking)

PRISHVITSYN, V. M., Eng.

Cand. Tech. Sci.

Dissertation: "Theory and Examples of Calculating the Strength of Hoist and Tumbling Hoist Cages in Mines." Moscow Mining Inst. Acad. I. V. Stalin, 22 Nov 47.

SC: Vechernyaya Moskva, May, 1947 (Project #17836)

MAKSIMOV, A.P., dotsent, kandidat tekhnicheskikh nauk; PRISHVITSYN, V.M.,
otvetstvennyy redaktor; SAVIN, M.M., redaktor; NADBINSEAYA, A.A.,
tekhnicheskiiy redaktor

[Engineering structures and buildings in the mining industry]
Inzhenernye sooruzheniia i zdaniia gornnykh predpriatii. Moskva,
Ugletekhzdat, 1954. 347 p. [Microfilm] (MLRA 8:4)
(Mine buildings)

LOZCOV, A.V.; PRIGORNYA, G.N.

Electric conductivity and viscosity of nickel-bearing electrolytes for the refining of copper. Izv. vys. ucheb. zav.; tekhn. met. 7 no.6:45-50 '64. (MIRA 18:3)

1. Ural'skiy politekhnicheskiy institut, kafedra tekhnologii elektrokhimicheskikh proizvodstv.

PRISKAC, M.

Comparison of hydroelectric and steam power plants. p. 87.
(ELEKTROTECHNICKY OBLZOR, vol. 22, no. 2, Feb. 1955, Praha)

30: Monthly List of East European Acquisitions, (EVAL), LC, Vol. 4, No. 11,
Nov. 1957, Uncl.

PRISKIC, Ivan, dipl. inz.; KIS, Franjo, tekst. tehn.

Dyeing of Leacril N with acid dyes. Tekstil Zagreb 13 no.6:
441-450 Jo '64.

1. Technical Consultant and Head, Dyeing Department of the Dyestuff Factory of the Chemical Combine, Zagreb (for Priskic).
2. Textile Technician, Dyeing Department of the Dyestuff Factory of the Chemical Combine, Zagreb (for Kis).

PRISKIC, I

"Development prospects of the consumption of aniline dyes."

p. 51 (Tekstilna Industrija) Vol. 4, no. 2, Feb. 1956
Belgrade, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, no. 4,
April 1958

COUNTRY : YUGOSLAVIA
CATEGORY : Chemical Technology. Chemical Products and
Their Applications. Dyeing and Chemical*
ABS. JOUR. : RZKhim., No. 23 1959, No. 84424
AUTHOR : Priskic, I.
INST. :
TITLE : Trends in the Development of Dyeing

ORIG. PUB. : Tekstil, 1959, 2, No 3, 179- 188

ABSTRACT : Review of the conditions prevailing in the
textile dyeing industry during the past 20
years. An attempt is made to explain wide
use of certain classes of dyes and of dying
methods with the present-day developments in
the realm of chemistry and particularly in
the realm of synthetic fibers. -- T. Budkevich

*Treatment of Textile Materials.
CARD: 1/1

PRISKIC, I.

Classification of aniline dyes by means of numbers. p. 35

TEKSTIL, Zagreb, Vol 5, No. 1, Jan 1956

SO: EEAL, Vol 5, No. 7, July, 1956

PRILKIN, Ivan, dipl. inz.

Iyera, a non synthetic fiber. Tekhn. Sbornik 1964, 1, 1-10
1968, 10, 164.

1. Technical Consultant and Head, Dyeing Department of the
Dyestuff Factory of the Chemical Combine, Perm.

YUGOSLAVIA / Chemical Technology. Dyeing and Chemical Treatment of Textiles. H

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 75962.

Author : Priskich.

Inst : Not given.

Title : Synthetic Fibers and Methods for Their Dyeing.

Orig Pub: Terstilna ind., 1957, 5, No. 12, 414-420.

Abstract: No abstract.

Card 1/1

PRISKURYAKOV, A.V., kandidat tekhnicheskikh nauk.

Technical and economic principles of selecting attachments. Vest.
mash. 37 no.5:70-75 My '57. (MLRA 10:5)
(Machinery--Attachments)

SERBAN, P.; PAPPO, A.; PRISLOPEANU, A.; TASCA, C.; BREAZU, H.

2 cases of primary obstruction of the suprahepatic veins (Budd-Chiari disease). Stud. cercet. med. intern. 4 no.2:211-217 '63.
(HEPATIC VEIN THROMBOSIS)

ROMANIA

PRISLOPEANU, Al.

Rumania

MD

Member of the staff of the Unified Hospital for Adults No 1,
(Spitalul unificat de adulti Nr. 1), Ploiesti

Bucharest, Viata Medicala, No 1, Jan 63, pp 27-32.

"A Case of Acute Abdominal Porphyria."

Co-authors:

→ POPOVICI, P., MD, Member of the staff of the Unified Hospital for
Adults No 1, Ploiesti.

PRISLOPEANU, A., dr.; MIRCEA, Zalaru; PAMBUCCIAN, Gr., dr.; BREAZU, H., dr.

The determination of chloride in gastric juice as a method
of detection of chronic gastritis (superficial and interstitial).
Med. intern. 16 no.1:97-102 Ja'64

1. Lucrare efectuata in Spitalul nr. 1 si 2 din Ploesti, in
colaborare cu Institutul de anatomie patologica "V. Iabes" din
Bucuresti.

*

FRISMAN, I. M., CHUMAKOV, M. P., and ZATSEPIN, T. S.

"Poliomyelitis," Moscow, 1954

Table of contents and abstracts of several sections of the book. Contains about 100 bibliographic references.

Translation No. 472, 18 Oct 55

PRISNEA, E.

The southern depression of Burnas and Danube River Valley.
Analele geol geogr 16 no.2:93-104 Ap-Je '62.

L 29867-66 ENT(1)/ENP(m)/ENT(n)/T WW/DJ/JAJ

ACC NR: AP6013213

SOURCE CODE: UR/0421/66/000/002/0133/0136 5/8

AUTHOR: Velik, N. P. (Dnepropetrovsk); Makhin, V. A. (Dnepropetrovsk);
Prisnyakov, V. E. (Dnepropetrovsk)

ORG: none

TITLE: Determination of the natural vibration frequencies of liquids in complex pipelines

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 2, 1966, 133-136

TOPIC TAGS: pipeline, liquid flow

ABSTRACT: The article considers a complex hydraulic system consisting of n individual pipelines, with a homogeneous liquid; the pipelines have a constant elastic characteristic over their length. The wave type process in the system will then be described by the equations:

$$\frac{\partial^2 G_1}{\partial \tau^2} + 2a \frac{\partial G_1}{\partial \tau} = c_1^2 \frac{\partial^2 G_1}{\partial x_1^2}, \dots, \frac{\partial^2 G_n}{\partial \tau^2} + 2a \frac{\partial G_n}{\partial \tau} = c_n^2 \frac{\partial^2 G_n}{\partial x_n^2} \quad (1.1)$$

Here G is the mass flow rate per second of the liquid; a is the decrement of the damping of the wave type process; c is the propagation

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L 29867-66

ACC NR: AP6013213

velocity of the elastic wave in the liquid filling the pipeline; x is the coordinate along the axis of the pipeline, calculated from its beginning; τ is the time. After transformation, the general solution can be brought into the form

$$G_1(x_1, \tau) = \exp(-a\tau) \sum_{k=1}^{\infty} A_{1k} \sin\left(\frac{\omega_k x_1}{c_1} + \varphi_{1k}\right) \sin(\sqrt{\omega_k^2 - a^2} \tau + \psi_k) \quad (1.3)$$

$$G_n(x_n, \tau) = \exp(-a\tau) \sum_{k=1}^{\infty} A_{nk} \sin\left(\frac{\omega_k x_n}{c_n} + \varphi_{nk}\right) \sin(\sqrt{\omega_k^2 - a^2} \tau + \psi_k)$$

where A_k , φ_k , and ψ_k are arbitrary constants determined by the initial and boundary conditions; ω_k are the natural values. The article first treats the problem of determining the natural vibration frequency of a liquid in pipelines connected in series, and then takes up the question of the same determination in branched pipelines. Orig. art. has: 28 formulas.

SUB.CODE: 20/ SUBM DATE: 03Apr64/ ORIG REF: 004

Card: 2/2 IV

L 29820-66 EWT(1)/ETC(f) JW

ACC NR: AP6012678

SOURCE CODE: UR/0170/66/010/004/0487/0490

AUTHOR: Prisnyakov, V. F.

ORG: State University im. the 300th Anniversary of the Union of the Ukraine and Russia, Dnepropetrovsk (Gosudarstvennyy universitet im. 300-letiya vossoyedineniya Ukrainy i Rossiyei)

TITLE: The characteristic of the thermodynamic process of the expansion of a gas with supply of heat

SOURCE: Inzhenerno-fizicheskii zhurnal, v. 10, no. 4, 1966, 487-490

TOPIC TAGS: thermodynamic analysis, expanding gas

ABSTRACT: The qualitative relationships between the individual thermodynamic parameters of a given system are determined by the coefficient $\alpha = \Delta u/q$, which represents that part of the heat expended in increasing the internal energy of the gas. In real processes, α is a variable quantity. In the present case, to establish the nature of the process at different moments of time use is made of the relationship:

$$m = \frac{dp}{p} / \frac{d\rho}{\rho}. \quad (1)$$

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UDC: 536.7

L 29820-66

ACC NR: AP6012678

Using the equation of state, Equation (1) is transformed to the following form:

$$m = 1 + \frac{\rho}{T} \frac{dT}{d\rho} \quad (2)$$

A curve exhibits the dependence of the characteristic of the thermodynamic process of the expansion of the gas, m , on the time, during the evacuation period. Another curve shows the thermodynamic process of the expansion of the gas at different values of m . The third and final curve shows the effect of the evacuation time on the course of the reaction. Orig. art. has: 10 formulas and 3 figures.

SUB CODE: 20/ SUBM DATE: 17Sep65/ ORIG REF: 008

Card 2/2 *IV*

MAKHIN, V.A.; PRISNYAKOV, V.F.; TOKAR', I.F.

Theory of the outflow of a boiling liquid through a centrifugal
jet. Izv.v.s.ucheb.zav.; av.tekh. 5 no.3:166-176 '62.
(MIRA 15:9)

(Fluid dynamics)

L 29127-65 EWT(1)

ACCESSION NR: AP5005535

8/0147/65/000/001/0063/0070

AUTHOR: Prisnyakov, V. F.

TITLE: On determining the speed of sound in hydraulic lines of complex cross sections

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 1, 1965, 63-70

TOPIC TAGS: sound velocity, sandwich structure, elastic modulus, stress load

ABSTRACT: The speed of sound in hydraulic lines of complex cross sections was determined analytically. The first line is a cylindrical structure of two reinforced shells (see Fig. 1 on the Enclosure). The analytical method consists of calculating the ratio $\varepsilon/E_{pr} = \omega$ for this particular geometry and of substituting it in the equation $c = c_{\infty} / \sqrt{1 - \varepsilon/E_{pr}}$, where ε is the elastic modulus of water and E_{pr} the elastic modulus of the hydraulic duct. For this analysis, ω is defined by $\omega = \frac{1}{\Delta p} \left(\frac{\Delta F}{F} + \frac{\Delta l}{l} \right)$, where F is the duct area, ΔF is the change in the area due to deformation, and l and Δl are the length and its change. The sum of the deformations is given by the deflection of the cylindrical strip clamped at the ends, the

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L 29127-65

ACCESSION NR: AP5005535

deformation caused by elongation of the intermediate coupling (see Fig. 1), and the deformation of the coupling as a circular rod. In its final form ω becomes

$$\omega = \frac{1}{E} \left(\frac{b^3}{h_1(b - 2b_r)} \left[0.0142b^3 \left(\frac{1}{b_1^3} + \frac{1}{b_2^3} \right) + \frac{1}{b_r} \left(\frac{h_1}{2} + 0.785R \left(1 + 5.442 \frac{R^3}{b_1^3} \right) \right) \right] + \frac{h_1 D_{cp}}{D_1 b_1 + D_2 b_2} \right) \quad \text{The second cross section is that of}$$

a spherical segment for which ω becomes $\omega = \frac{1}{E} \frac{3(1-\mu)R^3}{8h(3R-h)}$ Finally, an expression is

derived for the speed of sound in the case of a variable cross section hydraulic duct. This is given by $c = \frac{1}{\sum_{j=1}^n \frac{l_j V \sqrt{1+\omega_j}}{c_{\infty}^2 + \beta_r(T_j - T^*) + \beta_p(p_j - p^*)}}$ where p_j is the fluid

pressure at section j and p^* is the pressure at which $c = c_{\infty}$. Orig. art. has: 29 formulas, 2 figures, and 1 table.

ASSOCIATION: none

Card 2/4

L 29127-65

ACCESSION NR: AP5005535

SUBMITTED: 22Jun64

ENCL: 01

0
SUB CODE: AS/ME

NO REF SOV: 009

OTHER: 003

Card 3/4

CHEREDNICHENKO, F.A.; PRISOVSKAYA, G.I. [Prisovs'ka, H.I.];
SKATINSKAYA, O.I. [Skatyns'ka, O.I.]; TSESHKOVSKIY, F.M.
[TSeshkovs'kyi, F.M.], red.; GULENKO, O.I. [Hulenko, O.I.],
tekh. red.

[Exhibition of plants growing under natural conditions; a
guide] Naturnyi pokaz roslynnytstva; putivnyk. Kyiv, Derzh.
vyd-vo sil's'kohospodars'koi lit-ry URSR, 1961. 24 p.
(MIRA 15:3)

1. Kiev. Vystavkaпередового dosvidu v narodnomu hospodar-
stvi Ukraini's'koi RSR.
(Ukraine—Plants, Cultivated)

PRISS, A. _____

The chief engineer. Rabotnitsa 40 no.3:1-2 Mr '62.

(MIRA 16:2)

(Vol'sk--Cement industries)

(Women as engineers)

PRISS, A.

They fight tuberculosis. Rabotnitsa 35 no.1:26-28 Ja '57.
(MLRA 10:2)

(Tuberculosis)
(Nicotinic acid isomers)

PRISS, B.N.

Late results of the treatment of tuberculous empyema by an active expansion method. Sov.med. 25 no.1:100-104 Ja '61. (MIRA 14:3)

1. Iz protivotuberkulezno dispansera No.11 (glavnyy vrach F.G. Grigorenko) Novosibirsk.
(TUBERCULOSIS)

BOMDAR', Z.A., doktor meditsinskikh nauk; KONCHALOVSKAYA, N.M.; doktor meditsinskikh nauk; PRISS, I.S.

Some laboratory methods of diagnosing Botkin's disease. Lab.delo no.2:8-12 Mr-Apr '55. (MLRA 8:8)

1. Iz gosital'no-propedevticheskoy terapivticheskoy kafedry (zav.-deystivel'nyy chlen AMN SSSR prof. Ye.M.Tareyev) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta.

(HEPATATIS, INFECTIOUS, diagnosis, laboratory technics)

(LIVER FUNCTION TESTS, in various diseases, hepatatis, infect.)

Priss 1.5,

USSR/Human and Animal Physiology - Liver.

R-7

Abs Jour : Referat Zhur - Biol., No 16, 1957, 70888

Author : Bondar, Nazaretyan, Priss

Title : The Treatment of Several Hepatic Diseases with Lipocaine.

Orig Pub : Probl. endokrinol. i gormonoterapii, 1956, 2, No 1, 51-68

Abstract : Eighty-two patients (76 with Botkin's disease and 6 with fatty degeneration of liver with different etiology) were given daily 2-3 tablets of lipocaine (L) containing 0.1g (10 units) of active pancreatic lipotropic factor and also 200 g. of cottage cheese with a large fluid intake. The administration of L was conducive to a more rapid shrinking of the liver and spleen size; a return of the biochemical indices and functional liver tests to normal, and also to general improvement. In a few severe cases there was no effect of L shown. In 5 out of 14 cases of the chronic form of Botkin's Disease, L gave a beneficial effect. In fatty dystrophy of the liver, L raised the level of phospholipids in the blood.

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Chair Propedeutic & Respiratory Therapy, 1st Med. School, Moscow

HAZARETYAN, Ye.L.; SOKOLOVSKAYA, Ye.M.; PRISS, I.S.; VALUYSKAYA, Ye.N.

Practical significance of general work of the epidemiology squad and the therapeutic section of a polyclinic in the early detection of Botkin's disease. Sov.med. 20 no.12:33-37 D '56. (MLRA 10:1)

1. Iz laboratorii deystvitel'nogo chlena Akademii meditsinskikh nauk SSSR prof. Ye.M.Tareyeva, polikliniki No.10 Shcherbakovskogo rayona Moskvyy i Instituta virusologii Akademii meditsinskikh nauk SSSR.

(HEPATITIS, INFECTIOUS, diag.
early diag.)

PRISS, I.S.

KONCHALOVSKAYA, N.M., doktor med.nauk; PRISS, I.S. (Moskva)

Significance of liver function tests in the diagnosis of chronic hepatitis and liver cirrhosis. Terap.arkh. 30 no.2:31-37 F '58.

(LIVER CIRRHOSIS, diagnosis,
liver funct. test (Rus)

(MIRA 11:4)

(HEPATITIS, diagnosis,
same)

TAREYEVA, I.Ye.; PRISS, I.S.; ROZANOVA, L.B.; ARBENINA, N.S.; ROZENBLAT,
V.M.; POD'YAGEL', M.I.

Outcome of Botkin's disease. Vop.med.virus. no.9:254-259 '64.
(MIRA 18:4)

1. Iz laboratorii deystvitel'nogo chlena AMN SSSR prof. B.M.
Tarayeva.

ANAN'YEV, V.A.; NARSKIY, S.V.; BESPROZVANNYY, B.K.; NAZARETYAN, Ye.L.;
PRISS, I.S.

Experimental study of infectious hepatitis in dogs. Report No.2:
Clinical and laboratory findings in infection. Vop. virus. 5 no.4:
468-473 Je-Ag '60. (MIRA 14:1)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(HEPATITIS, INFECTIOUS)

PRISS, I.S.

Changes in the blood lipid content in arterial hypertension.
Terap.arkh. 31 no.7:69-77 J1 '59. (MIRA 12:11)

1. Iz kafedry propedevtiki i gosital'noy terapii (zav. -
deystvitel'nyy chlen AMN SSSR prof.Ye.M.Tareyev) sanitarno-
gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M.Sechenova.

(LIPIDS blood)

(HYPERTENSION blood)

PRISS, I.S.

Some features of lipid metabolism changes in uncomplicated hypertension
(MIRA 11:11)
Sov.med. 22 no.10:9-19.0 '58

1. Iz kafedry propedevticheskoy i gosital'noy terapii (zav. -
deystivtel'nyy chlen Akademii meditsinskikh nauk SSSR prof.
Ye.M. Tereyev) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo or-
dena Lenina meditsinskogo instituta imeni I.M. Sechenova.

(HYPERTENSION, blood in.

lipids (Rus))

(LIPIDS, in blood

in hypertension (Rus))

BONDAR', Z.A., VINOGRADOVA, O.M., PRISS, I.S.

Liver and blood protein changes in systemic lupus erythematosus.
Terap.arkh. 30 no.8:63-77 Ag '58 (MIRA 11:9)

1. Iz kafedry obshchey i gosital'noy terapii (zav. - deystvitel'nyy
chlen AMN SSSR prof. Ye.M. Tareyev) sanitarno-gigiyenicheskogo fakul'
teta I moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
Sachenova.

(LUPUS ERYTHEMATOSUS, DISSEMINATED, physiol.
liver & blood proteins (Rus))

(BLOOD PROTEINS, in var. dis.
lupus erythematosus, disseminated (Rus))

(LIVER, invar. dis.
same (Rus))

RUSS I. YA.

Nov 1965

USSR/Medicine - Vaccination, BCG
Medicine - Tuberculosis

"BCG Vaccination in Its Modern State," B. I. Yakhnis, I. Ya. Irist, 6 pp

"Vrachebnoye Delo" Vol XXIX, No 5

General discussion of results of vaccination of children, with statistical data on tuberculin allergy (30%), etc.

PA 10785

ma.

Properties of Alloys 2.

*Viscosity of Alloys of the System Lead-Tin. A. M. Butov, I. S. Pries, and K. G. Shvidkovsky (*Zhur. Tekhn. Fiziki*, 1931, **21**, (11), 1319-1324; *Appl. Mechanics Rev.*, 1952, **5**, 269). - (In Russian). By measuring the decrement of torsional oscillations of a cylindrical beaker filled with liq. metal, the dynamic viscosities of pure Pb and Sn and of Pb-Sn alloys (20, 35, and 60% Pb) were determined at 8 temp. between 230° and 610° C. The paper contains no experimental details and no complete presentation of the theory of measurement (ref. is made to previous work), but there is a supplement to the theory providing a relatively simple numerical evaluation of the experimental data. Results are given to 3 figures.

PFISS, L.S.

USSR/Physics - Viscosity Meter

Jun 52

"Theory of the Rotational-Oscillational Viscosity Meter for Strongly Viscous Liquids," L. S. Piss, Lab of Mol and Thermal Phenomena, Chair of Phys, Moscow State U

"Zhur Tekh Fiz" Vol XXII, No 6, pp 1050-1061

Author attempts further development of Ye. G Shvidkovskiy's viscosimeter for molten metals (cf. "Uchenyye Zapiski MGU (Moscow State U)" 74, 1944), "Viscosity of Liquids and Colloidal Solutions, Part II," 1944; "Vestnik MGU, Ser Fiz" 12, 1950). Author's method facilitates application

219793

to measurements of liquids with high kinematic viscosity, in particular slags. Indebted to Ye. G. Shvidkovskiy. Received 14 Feb 52.

219793

1845. Questions of method in the study of the strength of vulcanised rubber under alternating stress. M. M. KEZNIROVSKI, E. G. VOSTROKUNTOV and L. S. DUSA. 'Starenie i Utomlennye', 1953, p. 78-88. The first part of this paper is devoted to an attempt to classify the fundamental dynamic cycles which may take place with repeated cyclic stressing of rubber. The second part discusses new Russian methods for the dynamic testing of vulcanised rubbers, making it possible to effect a series of basically different dynamic cycles and to investigate not only the fatigue strength but also the extent of fatigue as shown by the change in properties of the material.

34424 D

FRISS, L. S.

①
Free Energy of Stressed Rubber

Dokl. Akad. Nauk

93(5), 813-816

Dec., 1953

U.S.S.R.

L.S. Friss

Index Aeronauticus
June 1954
Plastics, Rubbers

In order to bridge the gap between the statistical theory of elasticity of rubber and experimental results, an expression for free energy is discussed which contains but one constant. For monoaxial deformations a formula for free energy is derived to describe elastic properties of rubbers made from non-crystallizing caoutchouc, with the aid of one constant only, for not too large deformations. The linear law of shear deformation, on which Mooney's theory is based, can be derived from the same formula. The fundamental formula for free energy of stressed rubber is not applicable to crystallizing rubbers whose elastic parameters are changing during deformation process due to crystallization. (Bibl. 5)

10-5-54
mif

PRISS, L. S.

FD-1244

USSR/Physics - Viscosity of molten metal

Card 1/1 : Pub. 129-6/25

Author : Shvidkovskiy, Ye. G., and Priss, L. S.

Title : Viscosity of molten metals and A. I. Bachinskiy's formula.

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, 9, No 1, 57-60, Feb 1954

Abstract : Gives the results of experiments on technically pure bismuth and lead. Obtains graphs showing the kinematic viscosity, in centistokes, as a function of temperature and relative density. Probable error was 3%. Twelve references, including 3 foreign.

Institution : Chair of Molecular and Thermal Phenomena

Submitted : April 2, 1953

PRISS, L.S.

A Study of the regularities in the deformation of loaded rubbers. M. M. Reznikovskii, L. S. Priss, and B. A. Logadkin (Sci. Research Inst. Tire Ind., Moscow). *Rubber. Zhur.* 16, 211-18 (1951); *J. C.A.* 47, 3603b. The quasi-equiv. modulus (E) of elasticity of unloaded vulcanized Na-butadiene rubber (I) and butadiene-styrene rubber (II) was independent of the previous deformations. The E of I and II contg. 10-40 parts channel black per 100 parts rubber was, for a deformation ϵ , independent of previous deformation ϵ_1 , if ϵ_1 was $< \epsilon$, and was smaller the greater the ϵ_1 , if this was $> \epsilon$. The ratio of E to ϵ after ϵ_1 to that after no deformation was independent of the concn. of the filler. The greater was ϵ_1 , the smaller was the difference between the E values for loaded and unloaded rubber. Between 300° and 370° Abs., E for loaded and unloaded rubbers was proportional to the abs. temp.; thus, E of loaded rubbers depended on the elasticity of the mol. chains. In confirmation of Patsikeev (1946), the stress-strain curves of loaded rubbers were independent of ϵ_1 when ϵ_1 was $< \epsilon$. Stress-strain curves of rubber strips were detd.; the stress-strain curves of the ruptured fragments were measured. These curves practically coincided with those of unloaded rubber at small ϵ values, but rose with increase of ϵ more steeply than the initial curves. The effect of ϵ_1 on E decayed in time, but had still 0.5 the original value after a rest of 8 months. The ratio of E_1 to E for 2 samples was identical to the ratio of k for these samples; independently of the concn. of filler where E_1 = the dynamic modulus of elasticity, k = the coeff. of internal friction.

Y. J. Nikerman

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(2)

Priss, L. S.

USSR/Chemical Technology. Chemical Products and Their Application -- Crude rubber, natural and synthetic. Vulcanized rubber, I-21

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6038

Author: Reznikovskiy, M. M., Vostroknutov, Ye. G., Priss, L. S.

Institution: None

Title: Problems of Method in the Study of Durability of Vulcanized Rubber Under Stresses Varying with Time

Original
Publication: Sb. Stareniye i utomleniye kauchukov i rezin i povysheniye ikh stoykosti. L., Goskhimizdat, 1955, 76-88

Abstract: Specific features of mechanical behavior of vulcanized rubber during fatigue tests, are considered. A classification is provided of the fundamental dynamic conditions of operation, which takes into consideration the dependence of working conditions of the sample on duration of the experiment. An apparatus is proposed, which puts into effect any of the dynamic conditions under consideration, and ensures performance of tests over a wide range of

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Crude rubber, natural and synthetic. Vulcanized rubber, I-21

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6038

Abstract: frequencies with variable values of mean and amplitudinal deformation. The tests are carried out under harmonic load and uniform deformation, and the dynamic characteristics of the vulcanizate are measured continuously. Of great practical interest for the characterization of fatigue durability of vulcanizates, is the symmetrical, sign-alternating load cycle, which excludes the occurrence of residual deformations during the tests. There is proposed a corresponding apparatus for testing cylindrical samples which perform under conditions of alternating flexure.

Card 2/2

PRISS, L.S., ANIKANOVA, K.F., BETTS, G.E., ZHAKOVA, V.G., KOMSKAYA, N.F., KARMIN, B.K.
REZNIKOVSKIY, M.M., CHERNIZINA, I.A., and SHTEYN, E.B.

"Soviet Polyisoprene Rubber SKI, Similar to Natural Rubber in Structure and Properties." Kauchuk i Rezina, No. 1, pp. 4-14, 1957

Translation 1119944

Prins, A. S.

Distr: $4E2c(j)/4E3d$ ¹⁵

1232. Dependence of the elasticity of rubber vul-
canisate on the molecular weight of the initial rub-
ber polymer. L. S. PRINS. Kolloid. Zh., 1957, 19,
607-14. An exact count has been made of the
number of effective molecular chains in the vulca-
nizate network formed by a monodisperse rubber and
a rubber with a molecular weight distribution follow-
ing Poisson's law. The correction for the initial
molecular weight was found to depend upon the
character of distribution only for relatively sparse
networks. The Flory equation $C = 2V_0(1 - 2M_c/M)$
contains an error and should be replaced by the
equation $C = 2V_0(1 - M_c/M)$. The possibility is
indicated of applying the formulae obtained to the
analysis of the mechanism of oxidative destruction
and chemical relaxation. There are 14 references.

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2 May
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Priss, L. S.

20-2-17/50

AUTHOR: Priss, L. S.

TITLE: On the Causes of the Non-Agreement of the Kinetic Theory of High Elasticity With the Experiment (O prichinakh raznoshdeniy mezhdu kineticheskoy teoriyey vysokoelastichnosti i qytom)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 223 - 226 (USSR)

ABSTRACT: Within the domain of not too great deformation (when Gauss' approximation is applicable) the main differences between the kinetic theory of the plasticity of spatial polymers and the experiment consists in the following: a) The regularities and rules resulting from theory do not give a sufficiently exact description of the experimental curves in the case of different types of deformation. b) The proportionality between the amount of the elastic constant and the number of nodes in the unit of volume of the lattice, which is predicted by the theory, is not confirmed by the experiment. The present paper endeavors to explain the reasons for the divergences mentioned under a). An analysis of the most important conditions upon which the construction of the theory was based led to the following conclusions concerning the cause of the divergences: a) The state which, in the experiment, was assumed to be the state

Card 1/3

On the Causes of the Non-Agreement of the Kinetic Theory of High Elasticity with the Experiment

20-2-17/50

of equilibrium, does not fully correspond to the elastic equilibrium attained. b) In theory the existence of foreign nodes and chains of the lattice are disregarded. These two circumstances change the "transversal dimensions" of the chains in the deformed state. The author then makes some remarks concerning the essential features of individual processes which take place in the spatial polymers with their deformation and an establishment of elastic equilibrium. Because of the incomplete equilibrium and the restricting influence of the foreign nodes the modification of the transversal dimensions of the chains in deformation must be taken into account. In a state that is near that of equilibrium the transversal dimensions of the chains change (with respect to their initial values) by less than is the case with the "length" l of the chains and in the case of the corresponding linear dimensions of the sample. For the modification of free energy in momentary deformation a formula is given and by means of this formula the case of uniaxial extension is then computed. The here derived theoretical dependences agree satisfactorily with the corresponding experimental dependences. The conclusions drawn from the here discussed considerations can in many ways be confirmed experimentally. In conclusion, a simplified formula of approximation for the modification

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